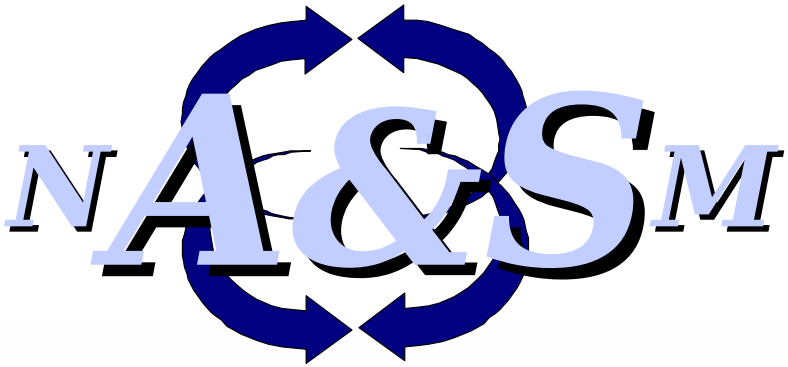
JSIMS Common Component Workstation (CCWS)



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28 March 2001

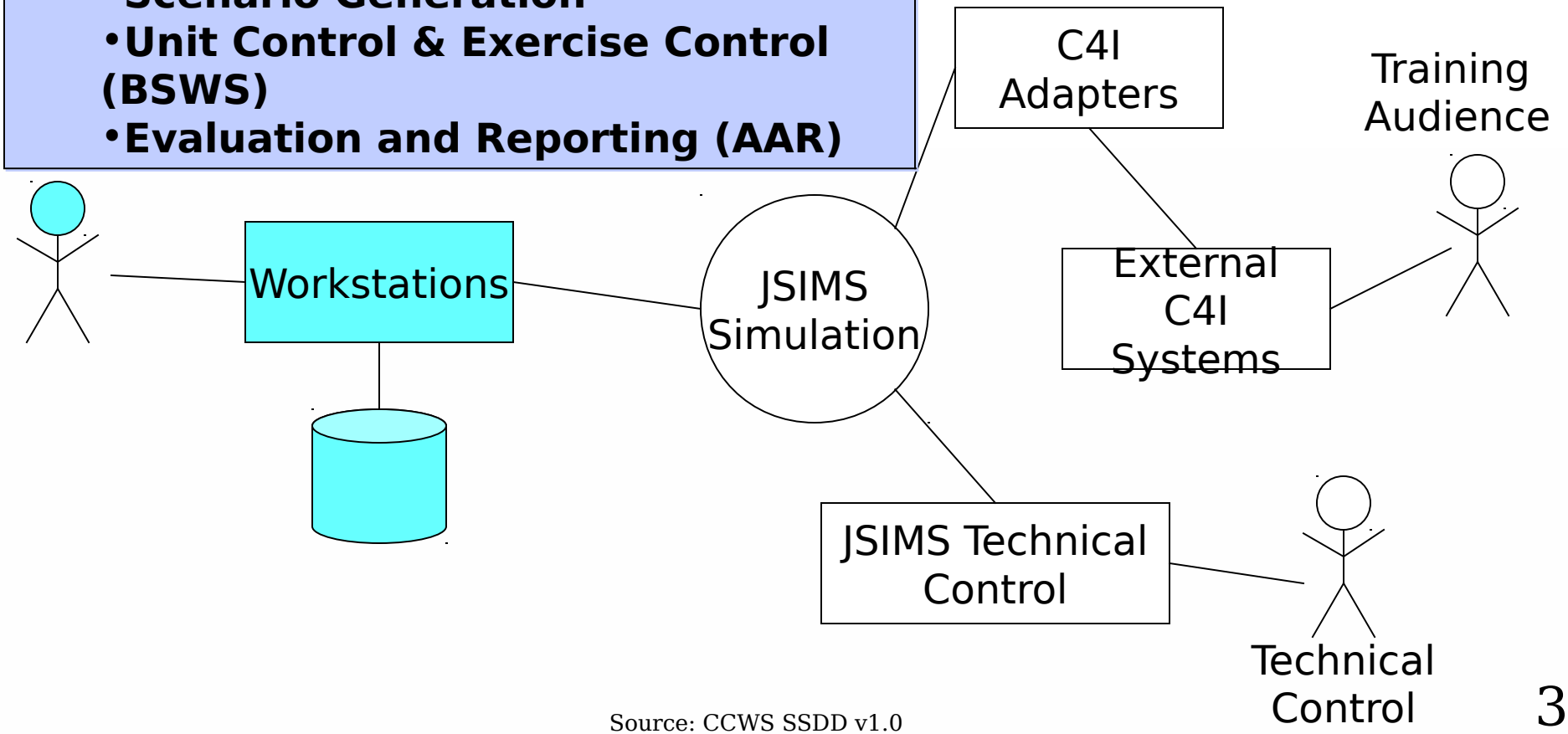
Agenda

- Definition
- History
- Development process
- User Feedback

What is CCWS?

Common Component Workstation (CCWS)

- **Scenario Generation**
- **Unit Control & Exercise Control (BSWS)**
- **Evaluation and Reporting (AAR)**

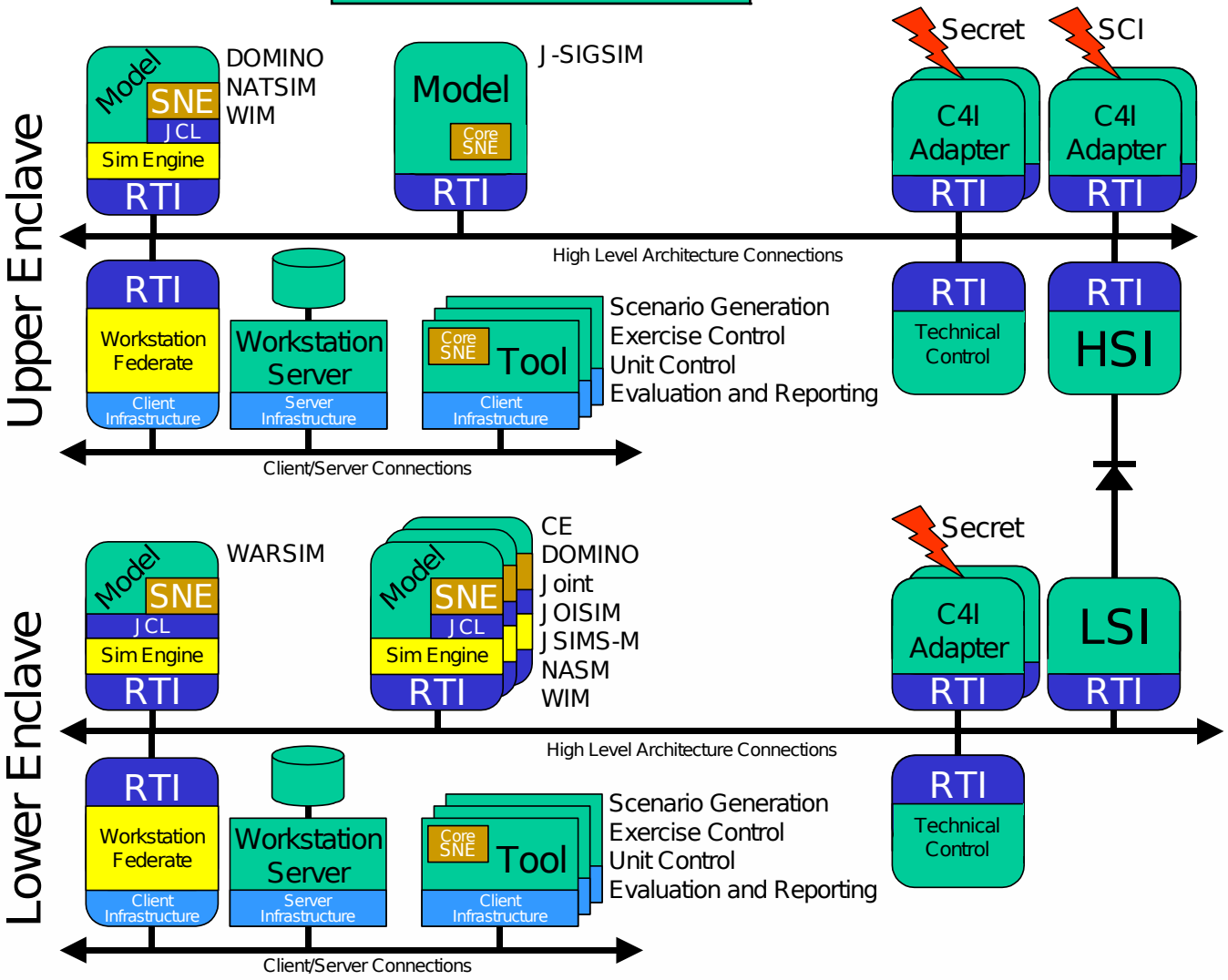


Source: CCWS SSDD v1.0

How CCWS Fits in the JSIMS Architecture

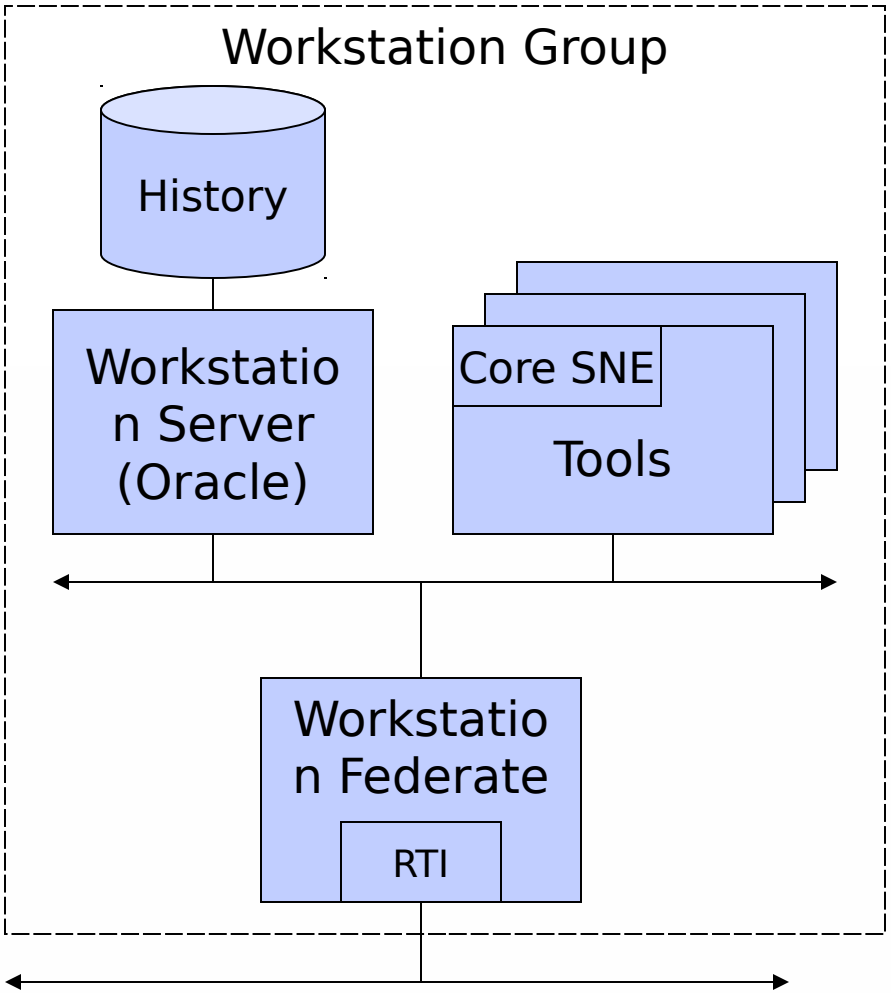
JSIMS Architecture (SSDD v15)

- Upper and Lower enclaves architecturally the same
- CCWS instance in each
- Note the Workstation Federate
- And separate Workstation server for CCWS tools
- Tools are what we have for Demo purposes



Workstation Client-Server Architecture

- **The Architecture of the Workstation Subsystem Is Based on the Client-Server Paradigm**
- **A Workstation Group Comprises:**
  - **A Data Set (Scenario or History)**
  - **The Workstation Server in Which the Data Set Is Stored**
  - **Zero or More Workstation Clients, Operating on the Data Set**
- **Workstation Clients Communicate with the Workstation Server Via Standard Client-Server Protocols**
  - **JDBC, ODBC, and (Possible Future Expansion) HTTP**



Source: CCWS SSDD Version 1

How did we get where we are?

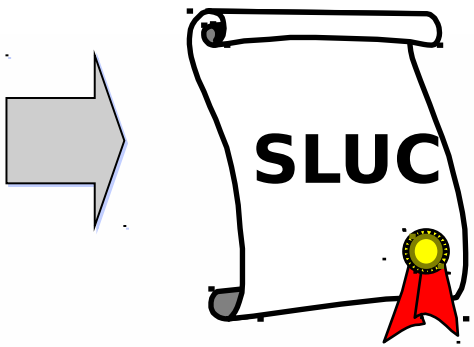
- **We used to have Life Cycle Applications (LCA)**
  - **NASM program never planned to develop a user interface**
  - **Intended to provide "GIAC like functionality"**
  - **Survived two JSIMS architectures (Inherited Framework approach and the High Level Design)**
- **Changed when USD directed program redirection (HLA) Dec 1999**
  - **Replanning during early 2000 identified several Common Components including the JSIMS Workstations**
  - **Replaced LCA and intended to truly be the single JSIMS user interface**

User Definitions Documents Developed During JSIMS Replanning Jan 2000

Joint/Services' users and developers generated
- System Level Use Case (SLUC) -how JSIMS supports an exercise
- User Interface CONOPS (UI CONOPS) - how users interface to JSIMS

Authoritative sources of users' view for employing the system
Used to define user expectations of the JSIMS User Interface-CCWS

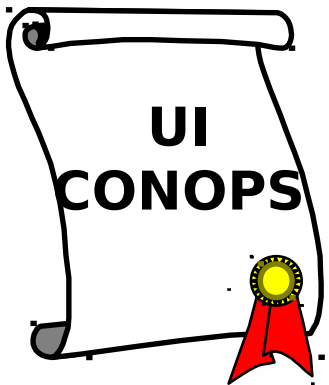
SSS
Pre, Post Exercise
Exercise Execution
C4I, Security
Status: Completed



Lessons Learned/
Reuse from
- Build 2
- WARSIM demo

TOR
of Exercise
Participants

- Joint/
Component
Functional
Usage
(IOC)



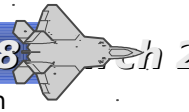
Map to
formal
requirements

Status: Final
Draft in review

How to get there from here

- **CCWS Kick-Off – Mar 00**
  - **Development team formed**
  - **SEI Level 3 process support TSDM (Level 2) requirement**
  - **Tailored WARSIM Process**
- **Maximize reuse (within constraints)**
  - **COMET 2D display**
  - **DII-COE Common Message Processor**
  - **Office product integration**
- **Highly compressed development schedule**
  - **Forces overlap of incremental build schedules**
  - **Increases risk**

CCWS Development Team



CCWS Leads
Major Paul Bourgeois JDA
Chuck Anderson JDAC

Systems Engineering & Integration
TBD

QA
Debbie Davis

Admin
- Terry Gianfalla
- Mandy Grazani

IRM
Nancy Snyder

SME
TBD

(Land)
DA's
- Navy (.5)
- **A&S (.5) Bob Bolling**
- USMC (.5)
- Intel (4 @ .5)
- JOISIM (.5)

Systems Engineering
- Lucy Medford
- Ken Porter
- DA's (1 x 7)
- **NASM: Mike Kelley**

Architecture
- Peter Berggren (.5)

FOM
- Bill Keller

HFE
- Dave Olsen (.5)
- Jeanine Williamson (.7)

User Guide
- Mike Luck
- Chuck Romano
- Judy Rubino
- Warren Scott (ITASC)

Integration
- Laura Shepherd (Lead)
- Kevin Earnest
- Steve Hunnell
- Wayne Lindo
- TBD (2) Integration
- TBD (2) Integ Facility Support

System Test
- TBD

CM
- Noemi Paz

SW Development Manager
Mark Hehmeyer
Amit Dey - Deputy

Scenario Gen Workstation
Grace Gorman

Joe Gohlke(.5/.5 DC)
Micheline Hunt
Susan Kerr
Wendy Lam
Jamie Mohr
Mike Murray
Marie Pham
Luisa Ponte
Lisa Woodman

Battle Space Workstation
Ed Kersey
Jerry Colon Tech Ld

Max Boggs
Chuck Cashulette
Hector Correa
Chun-Chin Fang
Al Fasone
Cynthia Johnson
Alex Longo
Yolanda Pettiford
Henry Slapkowski
Chris Williams

AAR / Data Collection Workstation
Nicki Zielinski

Sandy Dawson
Kimberly Cook
Sandy Dawson
Patty Devine
Matt Gerber
Gary Daneshamand
Jennifer Gray
Cheryl Lee

Common
Jerry Dreggors

Susan Hilt
Shetal Lala
Terence Lui
Yu Luo
Max Miles
Ann Nguyen
Hai-An Nguyen
Joe Osburn
Sam Truong

- JSIMS Joint Development Agent – Program Manager
- Multi-Contractor Team – Mostly TRW, SAIC, LMIS
- Labor In Kind support from other JSIMS Developers

Involving the users

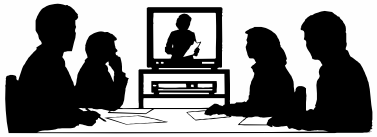
User Feedback to Developers

Level 1 Feedback, related to overall concepts, approaches, etc.

Lettered Prototype
- furthers development of numbered prototype
- reviewed by internal SMEs and SEs

Developers

Increment completed, comments addressed



Numbered Prototype, reviewed by current legacy system users

Level 2 Feedback, very specific, task-based demonstrations

Developers

Lettered Prototype, reviewed by internal SMEs and SEs

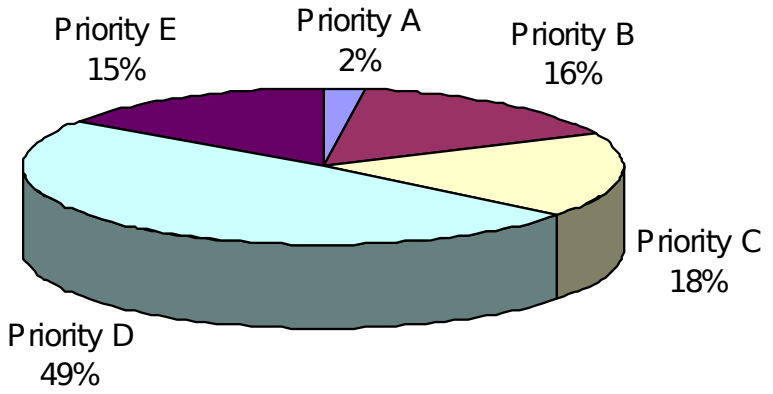
Increment 2 Used for this User Feedback session

Sep 00			Feb 01			Jun 01		Oct 01
Proto A	Proto B	Inc 1	Proto C	Inc 2	Proto D	Inc 3	Proto E	Inc 4

Inc 1 Executive Agent Priorities

- **Feedback session conducted 13-20 Sep 00 at LMIS, Orlando**
- **90 Users (including 5 AFAMS, 4 from BTS and WPC)**
- **455 Raw comments consolidated to 173 prioritized comments**
- **Included in the January CCWS In Progress Review for Requirements (IPR-R)**

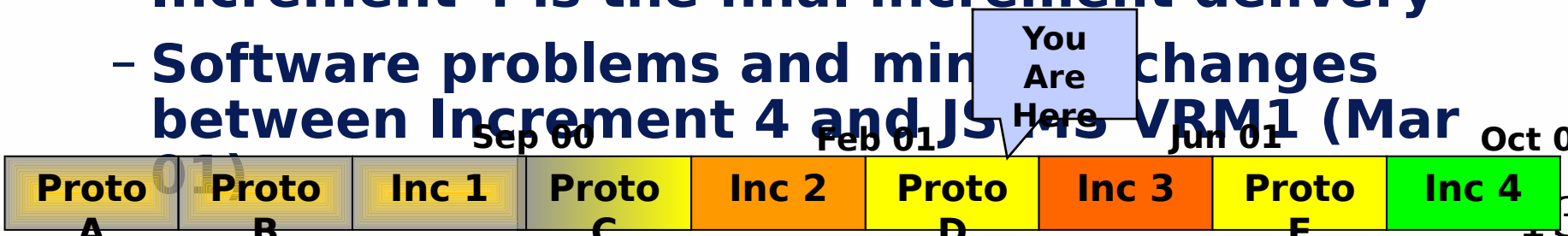
Priorities for Increment 1 Directive Comments



P		Example
A	System fails to function without this - implement ASAP	Performance must be improved, to include map load and redraw times, time to load pallette, time for order entry panels to pop up, time to load task organization
B	System is seriously hampered without this, however a workaround exists - Implement ASAP	Need an undo button for all actions
C	System fails to function without this - implement prior to Increment 3	Add "GEOREF" to choices in location format
D	System is seriously hampered without this, however a workaround exists - Implement prior to VRM1	Use drop lists for items where there is limited choices for data input. Make it apparent at first glance that there is a list associated with that field
E	This would improve useability of the system - implement when possible, but not at the expense of higher priorities.	Ensure all data fields are justified in a common manner; suggest left-justification

Importance of This User Feedback Session

- Prototype D currently under development
- This user feedback session finished May 01
- Compilation of results to developer by Jun 01
  - Too late to significantly alter Increment 3
- Results will mostly affect Increment 4
  - Increment 4 is the final increment delivery
  - Software problems and min changes between Increment 4 and JSIMS VRM1 (Mar 01)



Increment 2 User Feedback Plan (USAF)

- **Differs from Increment 1 feedback**
  - Taking CCWS software to the centers where possible
  - More direct involvement of Domain System Engineers and Subject Matter Experts (Mike Kelley, Bob Bolling)
  - Targeting typical sim center hands-on operators
- **USAF Schedule:**
  - 28 Mar (Today) – NASM TIM
  - 9-11 Apr – Warrior Preparation Center
  - 17-19 Apr – C2TIG
- **Emphasis on Air and Space**
  - Will include some Joint functions, particularly at the WPC
  - Other (non-NASM) user feedback events at NSC, JTASC, San Diego run by JSIMS Maritime, WARSIM and the JWFC

How we will conduct user feedback session

- Detailed scripts for each component
  - 2D Display
  - Scenario Generation
  - Battlespace Workstation
  - After Action Review
- Structured session
- All participants progress together
- Write down all comments!
- Opportunity to identify likes/dislikes directly to the developer